Nathan Jeruzal
National Weather Service Grand Rapids, MI

#### Overview

The month of May 2011 was characterized by above normal temperatures across Southwest Lower Michigan. May 2011 was a relatively wet month with many locations seeing around 20 out of the 31 days with at least a trace of rain. Even though rain occurred on many days of the month, rainfall ranged from below normal across portions of the area, to above normal across other locations.

May 2011 was a month in which fairly decent periods of temperatures swings occurred. Most of the warm days and cold days cancelled each other out through the month. There were a couple of periods in which the temperatures were much above normal, that ultimately led to the month being above normal. The much above normal periods were: May 11th through the 13<sup>th</sup>, and May 30th and 31st. These days saw average daily temperatures of 15, to almost 25 degrees above daily normals.

Rainfall amounts and departures for the month of May varied across the area. Rainfall amounts were around an inch or so lower than average across most of the area northwest of a Muskegon to Clare line. These areas saw generally 2 to 3 inches of rain through the month. Areas southeast of the Muskegon to Clare line saw average to around 2 inches above average rainfall amounts. From 3 to over 6 inches of rain fell in May, with the highest amounts near the Jackson area.

Most of May 2011 was a relatively quiet month as far as severe weather was concerned. Until the 28<sup>th</sup>, there was only one severe weather event. That event was a couple of isolated cells across Allegan and Barry counties that produced hail just a little bigger than quarters, or up to 1.25 inches in diameter. That event also caused some minor flooding as the storms were slow movers and heavy rain producers.

The extreme end of the month became a bit more active with severe weather as a very warm air mass moved into the area. A line of strong to severe thunderstorms moved across the southern two rows of counties during the afternoon hours on Sunday the 29th. The main impact was damaging winds of 50 to 70 mph. Some local areas near Fulton in Kalamazoo County, Battle Creek, Southeast Eaton County, and some locations in Ingham County saw enhanced damage that occurred from wind gusts of 80, to locally 100 mph.

Another severe weather event occurred on the last day of the month, although impacts were very limited and confined to mainly portions of central Lower Michigan. Some ping pong ball size hail fell, and winds of 65 mph occurred.

TABLE 1. Reported temperature, precipitation and snowfall amounts for [Month] YYYY at selected climate stations in Southwest Lower Michigan.

Location		Temperature (degrees F)	Precipitation (inches)	Snowfall (inches)
Grand Rapids	Reported	60.0°	4.54	0.0
	Normal	58.1°	3.35	Trace
	Departure	+1.9°	+1.19	0.0
Lansing	Reported	59.1°	6.81	0.0
	Normal	57.1°	2.71	Trace
	Departure	+2.0°	+4.10	0.0
Muskegon	Reported	59.1°	2.54	0.0
	Normal	56.1°	2.95	Trace
	Departure	+3.0°	-0.41	0.0

Some of the records that were set during the month of May 2011 included:

May 12th - Muskegon set a record high of 83 degrees

May 13th - Lansing set a record rainfall of 1.37 inches

May 29th - Lansing set a record rainfall of 1.32 inches

May 2011 was the 5th wettest May on record

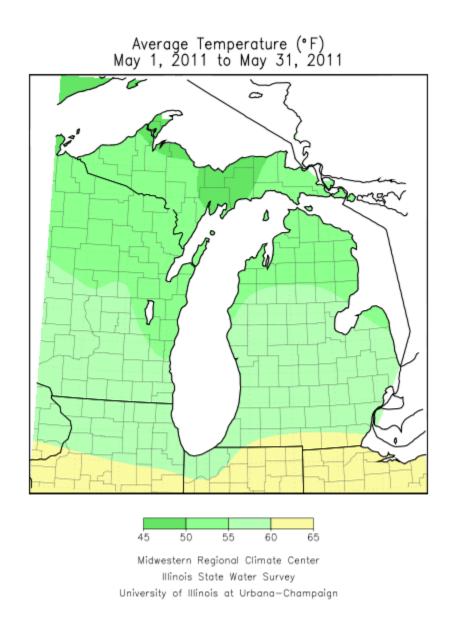


FIGURE. 1. Average temperature (in degrees F) for May of 2011.

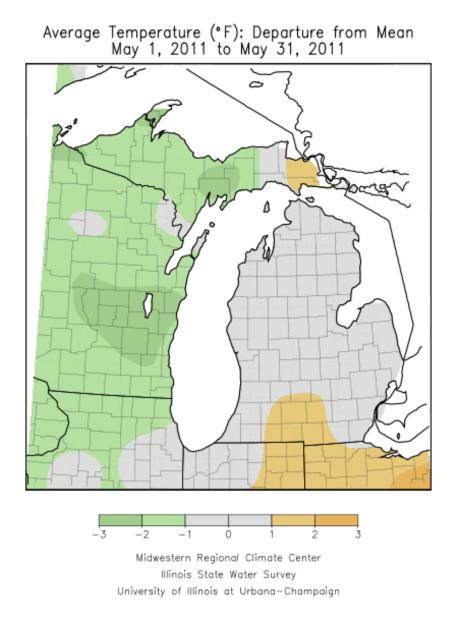


FIGURE. 2. Average temperature departure (in degrees F) for May of 2011.

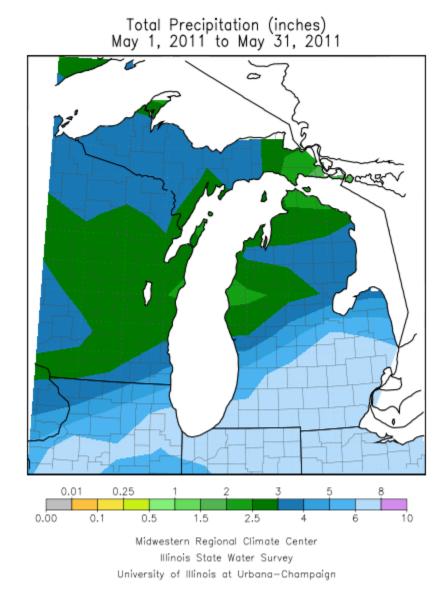


FIGURE. 3. Total precipitation (in inches) for May of 2011.

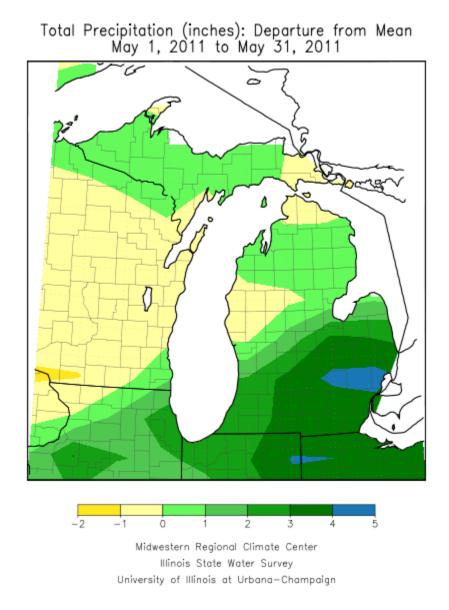


FIGURE. 4. Average precipitation departure (in inches) for May of 2011.

